

California Regional Water Quality Control Board  
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2005-0046

FOR

RATNA LING RETREAT CENTER  
WASTEWATER TREATMENT FACILITY

Sonoma County

**FLOW MEASUREMENT**

Wastewater flow to the wastewater dispersal system shall be determined at least monthly. During periods of heavy facility use, the average daily flow to each system shall be determined at least weekly. The average daily flow shall be determined using the reported pumping capacity of each pump station, in gallons per dose, the number of doses pumped and the number of days since the previous reading. Alternative means to determine wastewater flow may be used upon approval by the Regional Water Board Executive Officer. All flow measurement devices shall be tested annually and their accuracy certified. Certification shall be submitted with the annual monitoring report.

**VISUAL MONITORING**

The Discharger shall conduct surface inspections of all septic tanks, lift stations, and leachfield and mound disposal fields no less than monthly to record any odors, evidence of surface runoff, or other signs of malfunction or improper operation. As part of the monthly inspection, the Discharger shall monitor observation tubes within the wastewater mound and at-grade systems to verify proper operation. The annual report shall include the daily volume of treated wastewater discharged to the disposal fields on the day of the inspection, any observations indicating non-compliance with provisions of waste discharge requirements, and any other pertinent information.

**GROUNDWATER MONITORING**

The purpose of groundwater monitoring is to determine satisfactory performance of the on-site wastewater treatment and disposal systems and to determine compliance with quality objectives for groundwater in the vicinity of the on-site wastewater disposal system. The groundwater monitoring program shall be as follows:

## 1. Monitoring Locations

The groundwater monitoring wells for mound and at-grade effluent dispersal systems shall be constructed and located in accordance with Sonoma County Public Health Department's Guidelines and Regulations for Non-standard Sewage Disposal Systems. For the shallow standard leachfield serving the lodge kitchen, groundwater monitoring wells shall consist of a minimum of two monitoring wells downgradient of the dispersal field and at least one upgradient well to measure background water quality. Additional monitoring wells shall be added to the monitoring network as needed. Samples shall be collected from all installed wells for the constituents specified in Table 1.

## 2. Monitoring Schedule

Ground water samples shall be collected from monitoring wells at least once per year and analyzed for the following constituents:

**Table 1 Groundwater Monitoring Constituents**

Constituent	Units	Type of Sample	Frequency
Total Nitrogen	mg/l	Grab	Annually
Nitrate Nitrogen	mg/l (as N)	Grab	Annually
Fecal Coliform Bacteria	MPN/ 100 ml	Grab	Annually

## SEPTIC TANK MONITORING

The Discharger shall make surface inspections of all septic tanks not less than monthly to record any odors, evidence of surfacing effluent, or other signs of malfunction. Septic tanks shall be inspected and pumped as described below. An inspection is not required during the year a septic tank is pumped.

**Table 2 Septic Tank Monitoring**

Parameter	Units	Type of Minimum Measurement	Inspection Frequency
Sludge depth and scum thickness in each compartment of each septic tank	Inches	Staff Gauge	Annually
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Annually
Distance between top of each sludge layer and bottom of outlet device	Inches	Staff Gauge	Annually

Septic tanks shall be pumped when any one of the following conditions exist or may occur before the next inspection:

- a. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment; or,
- b. The scum layer is within three inches of the outlet device; or,
- c. The sludge layer is within eight inches of the outlet device.

### **ANNUAL REPORT**

The Discharger shall submit an annual report to the Regional Water Board for each calendar year. The report shall be submitted so that it is received by the Regional Water Board by March 1<sup>st</sup> of the following year. The report shall include, at a minimum, the following:

1. *A Letter of Transmittal:* Each report shall be submitted with a letter of transmittal. This letter shall include the following:
  - a. Identification of facility: Name, address, Order number, and WDID number;
  - b. Date of report and monitoring period;
  - c. Identification of all violations of permit conditions found during the monitoring period;
  - d. Details of the violations: parameters, magnitude, test results, frequency, and dates;
  - e. The cause of the violation;
  - f. Discussion of corrective actions taken or planned to resolve violations and prevent recurrence, and dates or time schedule of action implementation;
  - g. Other relevant information including, but limited to, incidents of wastewater treatment and collection system equipment failure, results of visual observations, and reports of wastewater spills or surfacing effluent;
  - h. Authorized signature and certification statement.
2. *Results of Analyses and Observations*
  - a. The results of flow monitoring to the disposal area (in gallons per day) for each month of the previous 12 months. For periods of no discharge, the monitoring reports shall indicated no discharge;
  - b. Any observations indicating spills, surfacing effluent or equipment malfunction;
  - c. Tabulations of all required analyses, including parameter, sample date and time, sample station, and test result;
  - d. The date and results of the required internal visual inspection of septic tanks and, when applicable, the volume of waste pumped from individual tanks; and
  - e. If the Discharger monitors any pollutant at the locations designated in the Permit more frequently than is required by the Permit, the results of such monitoring shall be included in the calculation and reporting of any values required in the discharge monitoring report.

3. *Report Submittal:* Copies of each monitoring report shall be mailed to:

North Coast Regional Water Quality Control Board  
5550 Skylane Boulevard, Suite A  
Santa Rosa, CA 95403

Ordered by: \_\_\_\_\_

Catherine E. Kuhlman  
Executive Officer

May 20, 2005

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